

**Appln No. 10/783,227**  
**Amdt date March 2, 2006**  
**Reply to Office action of January 11, 2006**

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

- 1-27. (Canceled)
28. (Previously Presented) An optical receiving apparatus, comprising:  
a signal brancher for branching an optical input signal received from an optical transmission line to a first signal component and a second signal component;  
a clock extractor for extracting a clock having an amplitude;  
a discriminator for discriminating the first signal component; and  
a threshold controller for generating a discrimination threshold for the discriminator according to a relationship between the extracted clock amplitude and a bit error rate to which the extracted clock amplitude corresponds.
29. (Previously Presented) The optical receiving apparatus of claim 28, further comprising a photodetector coupled before the signal brancher for converting the optical input signal to an electrical input signal, wherein the signal brancher branches the electrical input signal from the photodetector to the first signal component and the second signal component.
30. (Previously Presented) The optical receiving apparatus of claim 29, further comprising a first linear amplifier electrically coupled between the photodetector and the signal brancher for amplifying the electrical input signal.
31. (Previously Presented) The optical receiving apparatus of claim 29, further comprising a second linear amplifier electrically coupled between the clock extractor and the threshold controller for amplifying the extracted clock.

**Appln No. 10/783,227**  
**Amdt date March 2, 2006**  
**Reply to Office action of January 11, 2006**

32. (Previously Presented) The optical receiving apparatus of claim 28, further comprising a first photodetector for converting the first signal component to a first electrical signal to be input to the discriminator, and a second photodetector for converting the second signal component to a second electrical signal to be input to the clock extractor.

33. (Previously Presented) The optical receiving apparatus of claim 32, further comprising a first linear amplifier electrically coupled between the first photodetector and the discriminator for amplifying the first electrical signal from the first photodetector.

34. (Previously Presented) The optical receiving apparatus of claim 32, further comprising a second linear amplifier electrically coupled between the clock extractor and the threshold controller for amplifying the extracted clock.